

REMARKS

The Examiner rejected Claims 16, 17, and 36 under 35 U.S.C. § 102(b) as being anticipated by Patent Number 6,375,762 (Larson). The Examiner objected to claims 18-20 as being dependent upon a rejected base claim. Such rejections and objections are noted. The Examiner allowed Claims 1-15 and 21-35.

Applicant respectfully submits that Claims 1-36 are allowable for the following reasons.

Record of Telephone Interview

The Applicant's Representative, Thomas A. Kulaga, initiated a telephone interview with Examiner Jesus D. Sotelo on September 10, 2004. The means-plus-function limitations of rejected Claims 16, 17, and 36 were discussed. Mr. Kulaga pointed out that MPEP section 2181, *et seq.*, requires, in addition to equivalency of function, consideration of the factor that the prior art element must be a structural equivalent of the corresponding element disclosed in the specification. No agreement as to any claim disposition was reached. Mr. Kulaga stated that he would provide a Response to the Office Action and point out the appropriate sections of the MPEP that describe how means-plus-function claim limitations are to be examined. Examiner Sotelo said that he would consider any information provided by Mr. Kulaga.

Rejection Under 35 U.S.C. § 102(b)

Addressing the Examiner's rejection of Claims 16, 17, and 36 under 35 U.S.C. § 102(b), Applicants respectfully suggest that Larson does not anticipate the claims of the present invention. Section 2131 of the Manual of Patent Examining Procedure describes the basis for anticipation under 35 U.S.C. § 102(b). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990).

With respect to Claims 16, 17, and 36, the Examiner states:

Larson et al discloses a tower attached to a marine vehicle and having an erect and a folded position; the tower includes a first member attached to a first strut **342** of the tower; a second member attached to a second strut **302** of the tower; means **347** for pivoting the first member about the second member; means **374** for locking the first member to the second member; and means **366** for operating the locking means.

Paper No.06152004, Application Serial No. 10/619855, at 2.

Larson discloses a system **10** that includes an upper tower frame **326** that pivots forward at a pivotal linkage assembly **346** and is secured with a coupling assembly **354** at its aft end. Larson, Fig. 15 & 16. The system **10** includes a forward U-shaped support **342** "pivotally attached at each of its ends to the starboard and port vertical supports **302**, **304**." Larson, col. 6, lines 64-66. "A pivotal linkage assembly **346** includes a pivot pin **347** operable with a mating fork assembly **348**." Larson, col. 6, line 67, to col. 7, line 2. The system **10** of Larson includes "a coupling assembly **354** [that] is operable between the frame **326** and the vertical supports **302**, **304**." Larson, col. 7, lines 10-11. Referring to Figures 19 to 21, Larson discloses the coupling assembly **354** as including a ball element **356** connected to a shaft **360** with a knob **366** that is rotated to operate the coupling assembly **354**. Larson, col. 7, lines 10-25. The shaft **360** "extends through the socket element **358** and has a threaded distal end **362** for engaging a threaded bore **364** within the ball element **356**." Larson, col. 7, lines 17-19.

Claims 16, 17, and 36 include means-plus-function limitations, as defined by 35 U.S.C. § 112, sixth paragraph. A means-plus-function limitation must be interpreted to cover the corresponding structure, materials, or acts in the specification and "equivalents thereof." 35 U.S.C. § 112, sixth paragraph; *see also* MPEP § 2181. The Examiner "must apply 35 U.S.C. 112, sixth paragraph in appropriate cases, and give claims their broadest reasonable interpretation, **in light of and consistent with the written description of the invention in the application.**" MPEP 2181, subsection I, pg. 2100-220, 8th ed., rev. 2 (emphasis added).

In accordance with MPEP § 2181, it is no longer acceptable practice for the Examiner to interpret means-plus-function limitations "as reading on any prior art

means or step which performed the function specified in the claim without regard for whether the prior art means or step was equivalent to the corresponding structure, material or acts described in the specification." MPEP § 2181, pg. 2100-220 (emphasis added). The current practice is that "the application of a prior art reference to a means or step plus function limitation requires that the prior art element perform the identical function specified in the claim." MPEP § 2182, pg. 2100-227. "However, if a prior art reference teaches identity of function to that specified in a claim, then under *Donaldson* **an examiner carries the initial burden of proof for showing that the prior art structure or step is the same as or equivalent to the structure, material, or acts described in the specification** which has been identified as corresponding to the claimed means or step plus function." *Id.* (emphasis added). The MPEP further states "The 'means or step plus function' limitation should be interpreted in a manner consistent with the specification disclosure." *Id.*

For making a *prima facie* case of equivalence for a means-plus-function limitation, the MPEP states

If the examiner finds that a prior art element

- (A) performs the function specified in the claim,
- (B) is not excluded by any explicit definition provided in the specification for an equivalent, and
- (C) is an equivalent of the means-(or step-) plus-function limitation,

the examiner should provide an explanation and rationale in the Office action as to why the prior art element is an equivalent.

MPEP § 2183, pg. 2100-228. With respect to element (C) above, that the prior art element is an equivalent, the MPEP states that a factor supporting such a conclusion is "(D) the prior art element is a structural equivalent of the corresponding element disclosed in the specification." MPEP § 2183, pg. 2100-228. The MPEP further requires that "the prior art element performs the function specified in the claim in substantially the same manner as the function is performed by the corresponding element described in the specification." MPEP § 2183, pg. 2100-228 (emphasis added).

Accordingly, it is necessary to consider the specification in determining the scope of the rejected claims. Because a claim is not anticipated by a reference if at

least one limitation or element is not found in that reference, not every claim limitation not found in Larson is discussed below.

Claim 16

Claim 16 includes a limitation for "a means for pivoting" and a limitation for "a means for locking said means for pivoting." With respect to the means for pivoting, Applicants' specification describes

components that function to pivot portions of the tower **106, 106'**. In the embodiment illustrated in Figures 2 to 6, these components include the first member **202**, the second member **212**, and the pivot bolt **518** rotatably coupled to the opening **510** in the second member **212**. In the embodiment illustrated in Figures 10 to 14b, these components include the first member **202'**, the second member **212'**, and the shaft **116** of the lock plate **1112** rotatably coupled in the opening **510** in the first member **202'**.

Specification, para. 43. With respect to the means for locking, Applicants' specification describes

components that function to lock the pivoting portions of the tower **106, 106'**. In the embodiment illustrated in Figures 2 to 6, these components include the spring **402** and the bolt **404**, which is secured by the opening **406** in the first member **202** and slideably engages the corresponding opening **516** in the second member **212**. In the embodiment illustrated in Figures 10 to 14b, these components include the locking pins **1124** which are secured to the second member **212'** and slideably engage the openings **1106** in the first member **202'**.

Specification, para. 44. Further, Applicants' Specification states

Both of the illustrated embodiments of the hinge assembly **110** and **110'** include components that function to operate, or move, the locking mechanism of the pivoting portions of the tower **106, 106'**. In the embodiment illustrated in Figures 2 to 6, these components include the operator **208**, which is guided by an opening **206** in the first member **202**. In the embodiment illustrated in Figures 10 to 14b, these components include the pushbutton **1002**, which moves within an opening **1102** in the first member **202'** and causes the locking assembly **1122** to retract the locking pins **1124** from the openings **1106** in the first member **202'**.

Specification, para. 45.

Applicants respectfully submit that Claim 16 is not anticipated by Larson because Larson does not disclose any equivalent structures corresponding to those

disclosed in Applicants' specification, and, therefore, Larson does not teach every element of the claimed invention. Specifically, Larson discloses a pivotal linkage assembly **346**, which is simple pivot with a pivot pin **347** and a mating fork assembly **348**. Larson, col. 6, line 67, to col. 7, line 8. Such structure does not correspond to the structure disclosed by Applicants. Further, Larson discloses a coupling assembly **354** at the opposite end of the frame **326** as the pivotal linkage assembly **346**. Larson, Figures 15 & 16. Applicants respectfully submit that this structure is totally dissimilar to the structure corresponding to the means limitation "for locking said means for pivoting." Applicants specification discloses locking pins **1124** arranged around the shaft **116**. This embodiment is contrasted with that disclosed in Larson in which the coupling assembly **354** includes threaded shaft **360** that engages a ball element **356**, and that coupling assembly **354** is located separate and apart from the pivotal linkage assembly **346**.

Accordingly, Applicants respectfully request that the Examiner withdraw his rejection of Claim 16 because the prior art elements perform the functions specified in the claim in a different manner as the function is performed by the corresponding element described in the specification. See MPEP § 2184, pg. 2100-232.

Claim 17

Claim 17 includes similar means-plus-function limitations as Claim 16. Accordingly, Applicants respectfully request that the Examiner withdraw his rejection of Claim 17 for the same reasons as Claim 16.

Claim 36

Claim 36 includes a limitation for "a means for releasably securing a portion of the tower to the vehicle," a limitation for "a means for locking said means for releasably securing." and a limitation for "a means for operating said means for locking." With respect to these limitations, Applicants' specification describes

The footer includes a footer body **702**, a releasable member **714**, and a spring-loaded footer bolt **708** with a footer operator **712**. The footer bolt **708** slides along a bored hole **802**. In the direction towards the first opening **716**, the bolt **712** is forced by a footer spring **706**, and in the opposition direction, the bolt **708** is moved by a footer operator **712**

Specification, para. 46.

Applicants respectfully submit that Claim 36 is not anticipated by Larson because Larson does not disclose any equivalent structures corresponding to those disclosed in Applicants' specification, and, therefore, Larson does not teach every element of the claimed invention. Specifically, Larson discloses a coupling assembly **354** that uses a threaded end **362** of a shaft **360**, which has its distal end connected to a knob **366**, to secure the end of the frame **326**, which is distal to the pivotal linkage assembly **346**, to the vertical supports **302**, **304**. Larson, col. 6, lines 33-37; Figs. 15 & 16.

Such structure does not correspond to the structure disclosed by Applicants, which are illustrated in Figures 7 to 9 of the Application. Applicants describe a releasable member **714** attached to a frame member. The releasable member **714** engages an opening **716** and a footer bolt **708** slideably engages the releasable member **714**, thereby locking it in place. See Specification, paras. 27-31 & 46. Applicants respectfully submit that this structure is totally dissimilar to the structure corresponding to the means limitations of Claim 36,

Accordingly, Applicants respectfully request that the Examiner withdraw his rejection of Claim 36 because the prior art elements perform the functions specified in the claim in a different manner as the function is performed by the corresponding element described in the specification. See MPEP § 2184, pg. 2100-232.

Claims with Objections

The Examiner objected to Claims 18-20 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form, including all the limitations of the base claim and any intervening claims. Applicants respectfully submit that base Claim 17 is allowable for the reasons stated above. According, Applicants respectfully request the Examiner withdraw his objection to Claims 18-20.

Conclusion

In view of the above reasons, it is believed that the above-identified patent application is in a condition for the issuance of a Notice of Allowance. Such action by the Examiner is respectfully requested. If, however, the Examiner is of the opinion that any of the drawings or other portions of the application are still not allowable, it will be appreciated if the Examiner will telephone the undersigned to expedite the prosecution of the application.

Please charge any additional fees associated with this communication, or credit any overpayment, to Deposit Account No. 16-1910 (29007.00).

Respectfully submitted,

A handwritten signature in black ink, reading "Thomas A. Kulaga". The signature is fluid and cursive, with the first name "Thomas" and last name "Kulaga" clearly distinguishable.

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